

## ***Utility programs***

***Note: All utility programs are run from the Monitor.***

RG-04-1088

## ***Formcopy***

The Formcopy program has two separate functions: formatting and copying.

### ***Formcopy functions***

Formatting prepares the magnetic media on a floppy disk, Winchester disk or tape cartridge for storage of data. Note that if you format an old disk or tape cartridge, you erase any previously stored information.

The copying function of Formcopy copies files and subcatalogs to and from any storage device in the system. You can copy a single file, a series of selected files, an entire subcatalog or an entire floppy from one device to another. You can also copy from any storage device into a subcatalog and from one subcatalog to another.

**Caution:** Carelessly used, Formcopy can obliterate valued information very quickly. Never format your Winchester disk(s) unless someone from N.E.D. specifically tells you to do so.

To format or copy:

1. Run the Formcopy utility.
2. Set the Formcopy options as desired.
3. Press Return type **ok** and press Return again.

The selected Formcopy function begins unless you have set the Select item to Yes. Messages appear on the screen indicating the progress of formatting and/or the names of files as they are copied.

**FORMCOPY** Format and Copy Utility    version of 1 December 1987

To issue a command, press the key that represents that command.  
To change an option, move the cursor over the option and press  
the space bar.

-----  
**COMMANDS:**

S View source catalog  
D View destination catalog  
I Interchange source & destination  
A Set alternate catalog  
Q Quit (return to operating system)

RETURN Initiate Copy

**OPTIONS:**

Mode:        Copy  
Source:      W0 (Winchester disk)  
Destination: F0 (Leftmost floppy)  
  
Select:      No  
Alphabetic:   No  
Erase:       No  
  
Disk format:

1. From the Monitor, type

**formcopy**

2. Press Return.

*Instructions for  
running Formcopy*

## *Setting Formcopy options*

Set the Formcopy options as desired by moving the cursor to the option and pressing Spacebar until the desired option appears.

### *Modes*

Copy	Copies from source to destination.
Move	Moves from source to destination.
Format and copy	Formats destination disk then copies.
Format and move	Formats destination disk then moves.
Format	Formats destination disk.

### *Source and destination*

Source and destination options include any storage device attached to your system (W0:, W1:, F0:, etc.) and any subcatalog (CC—current catalog or AC—alternate catalog). Use the commands on the left of the screen to help you set up the catalogs you want.

Type "S" or "D" to view a catalog of source or destination.

Type "A" and then a subcatalog treename to set that subcatalog among the source and destination options (AC).

Type "T" to interchange source and destination options.

## ***Setting Formcopy options (continued)***

***Select:***     *Yes or No*

A "Yes" selection allows you to select files to be copied from a directory of the source device or sub-catalog.

***Alphabetic:*** *Yes or No*

A "Yes" selection copies files in alphabetic order.

***Erase:***     *Yes or No*

A "Yes" selection erases the destination disk before copying or moving.

## ***Formcopy (con't)***

### ***Selecting files for copying***

If you have set the Select item to Yes, the select option screen appears before copying begins.

1. Move the cursor to each desired file.
2. Press the Spacebar.

The "|" symbol preceding the filename changes to ">."

3. Press Return.

Copying of selected files begins when you press Return.

## Formcopy select option

Copying from: W0 (Winchester disk)  
Copying to: F0 (Left most floppy)

---

SELECT option: Use cursor keys to move over files. Press space bar to select or deselect a file to copy. Press R to review copying order. Press RETURN to initiate copy. Press Q to abort copy. Selected files are marked with a >.

>SYSTEM	MONITOR	INDX	SYMED	TABS	SOURCE
>FC	IN	MISC	PROFILE	SYNCOM	2\$
>MODULE	PS	PUMP	LASER	ERR.M	3\$
KLUGE	MEAS	ORK-MFM	BOOT	1\$	4\$
SONG1	SONG2	SONG3	SONG4	SONG5	SONG6



## ***Configur***

The Configur utility defines the hardware configuration of your system for the system software.

## ***Configuring the system software***

System software is configured here at New England Digital for the particular set of hardware in your system. Whenever you upgrade your system, you use the Configur utility to reconfigure your software.

For example, if you add a Winchester or an optical disk to your system, you reconfigure the system software so that the new device appears on the directories and displays.

To configure your system software:

1. Make sure you are in the top-level catalog of your W0: drive.
2. Run the Configur utility.
3. Set the Configur parameters as shown on the following pages.
4. Press Return.
5. Check that all settings are correct, type **ok** and press Return again.

The Configur program reconfigures the system software to your new specifications.

At any time you can press **Q** to quit Configur and return to the Monitor without reconfiguring the system.



## Configur Display

CONFIGUR Configuration Utility				version of 1 Dec 1987	
To change an item, move the cursor over the item and press the space bar. Press Q to quit (exit to MONITOR) or RETURN to write configuration.					
Configuration of: W0					
Terminal: MG600			Storage Devices:		D T L
Printer: IDS/Dataprods	Graph: Yes		W0: (1)	5", SCSI	0,5,0
System Device: W0:			(2)	5", SCSI	0,4,0
Current Device: W0:			(3)	None	
			(4)	None	
Music Interfaces:			W1: (1)	5", 15 MB	0,0
Keyboard (D130):	Yes		(2)	None	
Synthesizer (D160):	Yes		(3)	None	
Sample-to-Disk (D66):	No		(4)	None	
Computer Options:			F0:	5" Supermini	
Memory Size:	60 K words		F1:	None	
Printer Interface:	Yes		R0:	None	
Processor Type:	Model C		R1:	None	
Hardware Mul/Div:	Yes		T0:	1/4" Cartridge	
Clock Speed:	200 Hertz		O0:	12" Write-Once	

1. Make sure you are in the top-level catalog of the W0: drive.
2. From the Monitor, type  
  
**configur**
3. Press Return.

*Instructions for  
running Configur*

## **Configur (con't)**

### ***Setting Configur parameters***

Set the configure items in the two boxes on the Configur menu to match your hardware. To change any configuration item:

1. Move the cursor to the item to be changed.
2. Press the Spacebar until the name of the hardware item or value desired appears.

**Warning:** Wrong settings of the configuration parameters can make the system inoperable.

### ***Terminal and printer***

If you have changed your terminal or printer, step through the options until the designation for your new equipment appears.

### ***System and current device***

The system device must be set to the device where your system software is stored. The current device is usually set to the same device as the system device.

## *Setting configur parameters (con't)*

### *Music interfaces*

The keyboard, synthesizer and sample-to-disk items are simple yes/no options.

### *Computer options*

The printer interface and hardware multiply/divide items are yes/no options. If you have upgraded your memory or processor, step through the options until they match your present equipment. Clock speed is always 200 Hz.

### *Storage devices*

Each storage device in your system—Winchester, floppy, tape or optical drive—is specified by designating its size and type. Winchester drive entries include a 2- or 3-digit address set at the factory. If you have added a Winchester, you may have to change its address. Call N.E.D. Customer Service for these instructions.

## **Shuffle**

The files on any storage device connected to the computer, except the tape drive and the optical disk, can be shuffled.

## ***Shuffling files***

You use the Shuffle utility to pack files and subcatalogs together so that all empty sectors are collected into a group. You can also rearrange the files so that specified files are collected into adjacent areas.

To shuffle files and subcatalogs:

1. Enter the subcatalog you want to shuffle.
2. Run the Shuffle utility.

The Shuffle screen appears with general instructions at the top, a box with the command keys used in this utility to the left, and a box with the two options available to the right.

3. Set the options as desired.
4. Press Return, check that the options are set properly, type **ok** and press Return again.

The files in the current catalog are shuffled. A listing of files being shuffled scrolls by on the screen.

SHUFFLE Utility		version of 1 December 1987
To issue a command, press the key that represents the command. To change an option, move the cursor over the option and press the space bar.		
COMMANDS:	OPTIONS:	
C to display Catalog	Storage Device:	W0 (Winchester disk)
Q to Quit (return to system)	Collect Mode:	No
RETURN to start shuffle		

1. Make sure you are in the catalog you want to shuffle.
2. From the Monitor type  
**shuffle**
3. Press Return.

*Instructions for  
running Shuffle*



## **Shuffle (con't)**

### ***Setting Shuffle options and selecting files***

To set Shuffle options:

1. Move the cursor to the item.
2. Press the Spacebar until the option you want appears.

#### ***Storage device***

Select current catalog or storage device to be shuffled.

#### ***Collect***

Set to "Yes" to specify files to be stored contiguously.

If the Collect option is set to Yes, the Shuffle collect screen appears before the shuffling begins. Select the files to be shuffled in the order you want them stored.

1. Move the cursor to each file in the order you want them to appear and press the Spacebar

The "I" symbol preceeding the filename changes to ">." You can review the order in which the files will be collected by pressing R.

2. Press Return.

The marked files are collected first in the order selected; then the remaining files are shuffled.

## Shuffle collect option

### Shuffling: W0 (Winchester disk)

COLLECT option: Use cursor keys to move over files. Press space bar to select or deselect a file to be collected. Press R to review the order in which the files will be collected. Press RETURN to initiate the shuffle. Press Q to abort the shuffle. Selected files are marked with a >.

>SYSTEM	MONITOR	INDX	SYMED	TABS	SOURCE
>FC	IN	MISC	PROFILE	SYNCOM	2\$
>MODULE	PS	PUMP	LASER	ERR.M	3\$
KLUGE	MEAS	ORK-MFM	BOOT	1\$	4\$
SONG1	SONG2	SONG3	SONG4	SONG5	SONG6



## **Resize**

The Resize utility is used to make a subcatalog larger for additional files or smaller to save disk space. You may be able to decrease the size of a subcatalog by a larger amount if it is first shuffled using the Shuffle utility.

## ***Resizing a subcatalog***

To resize a subcatalog:

1. Run the Resize utility.

Instructions appear on the screen with a prompt asking for a subcatalog name.

2. Enter the name of the subcatalog you want to resize and press Return.

The Resize screen appears with information about the maximum increase or decrease possible.

3. Enter either the amount of increase or decrease or a new size and press Return.

A message tells you if the catalog is being moved and its new size. When the process is finished the computer returns to the Monitor.

You can skip the instructions and go directly to the Resize screen by typing `resize` followed by a subcatalog name.

If you know the amounts of change or size you want, you can enter them with the `resize` command using the following syntax:

```
resize <subcatalog name> <+n, -n or n>
```

## Resize Display

```
RESIZE Resize Utility                                version of 1 December 1987

Options: +n    Increase subcatalog size by n sectors
        -n    Decrease subcatalog size by n sectors
        n     Set subcatalog size to n sectors

Subcatalog: ABC                                     Current Size: 500
-----
Increase Subcatalog Size                           Decrease Subcatalog Size

Without moving                                     Without shuffling
Maximum increase: +150                             Maximum decrease: -10
Maximum size: 600                                  Minimum size: 150

By moving                                           By shuffling
Maximum increase: +200                             Maximum decrease: -23
Maximum size: 10000                                Minimum size: 130

-----
Enter name of subcatalog to resize or <RETURN> to quit:
```

1. From the Monitor type

**resize**

2. Press Return.

*Instructions for  
running Resize*

## **Find**

The Find utility searches for patterns in text files.

### ***Find search patterns***

A Find search pattern can be a single character or a string of characters. It can include one or both of two "wild card" symbols.

- A question mark (?) in a search pattern stands for a single character.
- An asterisk (\*) in a search pattern stands for a string of characters.

For example, if you want to locate all text enclosed in quotation marks, use the search pattern

`"*"`

If you want to search for a group of related files such as FileAB, FileCD, etc., use the search pattern

`File??`

If the search pattern you want to locate contains either an asterisk (\*) or a question mark (?), precede the asterisk or question mark with a slash (/) to mark it as a character in the search pattern rather than a wild card.

For example, if you want to locate the string

`A*B`

use the search pattern

`A/*B`

This program searches selected files and lists those in which a given pattern is found. A pattern may include the following wildcards:

- \* : any string of zero or more characters
- ? : any single character
- / : indicates that the following \*, ?, or / is not a wildcard

Filenames specified for the search may also include wildcards.

Pattern to search for?

1. Insert the System Utilities Disk into the F0 drive.
2. From the Monitor, enter the commands

**old f0:find;run**

If the Find utility is in the top-level catalog of the Winchester, run it by entering the command

**find**

*Running the Find utility*

## ***Find (con't)***

### ***Searching with Find***

To search for a pattern using the Find utility:

1. Run the Find utility.

A dialog appears requesting a search pattern.

2. Type in the search pattern including any wild card characters, and press Return.

All text files in the current catalog and all subcatalogs are searched for the pattern specified. Files containing the search pattern are listed on the screen.

At any time during the search you can press Spacebar to see the file and line currently being searched or Break to stop the search.

If the Find utility is installed in the top-level catalog of your system device, you can search for patterns in specified files in your current catalog directly from the Monitor.

- Enter the command

**find <pattern> -f <filenames>**

If no filenames are specified, all files are searched. Files containing the search pattern are listed on the screen.

## *Using Find options*

You can tailor your search in a number of ways using Find options.

To search using the find options:

1. Run the Find utility.

A dialog asks you for a search pattern.

2. Press Return *without* entering a search pattern.

A dialog appears asking if you need instructions.

3. Type Y for yes or N for no.

If you type Y, instructions for using the wildcard characters appear, plus a dialog requesting a search pattern.

If you type N, only the dialog requesting the search pattern appears.

4. Type in the search pattern, including any wild card characters, and press Return.

A new dialog appears asking you to specify any desired options.



## ***Find (con't)***

### ***Using Find options (con't)***

5. Press ? and then Return to view the search and display options.
6. Select an option by typing the character that precedes it. Select more than one option by typing the appropriate characters without any spaces between the characters. Press Return.

A dialog appears requesting the names of the files to search.

7. Type in the selected filenames separated by spaces. (Filenames can including wildcards.) Or type \* to search all files in the current catalog. Press Return.

The pattern is searched for in the current file or in the specified files (or all files in all subcatalogs in the current catalog if option t is selected).

Files containing the search pattern are listed on the screen.

At any time during the search you can press Spacebar to see the file and line currently being searched or Break to stop the search.



Options (type ? for help) ?

The following options may be specified:

- c: Distinguish between upper case and lower case.
- x: List files/lines that do NOT match.
- t: Search files in subcatalogs also.

The following display options may be specified:

- f: Include lines.
- l: Include lines and line numbers.
- n: Exclude filenames from F or L.
- #: List filenames with number of matches.
- s: Include search status information.

## ***Caption***

The Caption utility, stored on the System Utilities Disk, is used to view sound file captions and to update them after they have been edited.

## ***Sound file captions***

The eight-character sound file name carries a limited amount of information about the sound file—an abbreviation of the instrument and the pitch at which it was recorded, for example.

In the Real-Time Performance system, you use the CAPTION command in the Sound File Editor to create sound file captions of up to 42 characters of additional information.

From the Monitor, you can use the Caption utility to view the captions of all the sound files in a subcatalog. From the Screen Editor, you can edit the captions, adding up to a total of 128 characters in each caption. Once the captions have been edited, you use the Caption utility again to update the sound files so that the edited version of the caption is stored with the sound file.

Thus, editing sound file captions is done in three steps.

1. From the Monitor, use the Caption utility to create a caption file containing all the sound file captions of the current catalog.
2. From the Screen Editor, edit the captions in the caption file.
3. From the Monitor, use the Caption utility to update the sound files with the edited captions.

### Sound File Caption Utility Program - 1 February 1987

This program lists out all sound files in the current catalog. It includes information about the sound file such as whether it is stereo or mono, how long it is (in seconds), and its caption. This list is also saved in a disk file to keep as a permanent record with the catalogued sound files.

This program will also update the captions of specified sound files.

This is done by running this program to create the original sound file list, changing the captions in the caption column using the screen editor, and then running this program again asking to update the captions.

Do you wish to view sound file captions [Y(es) or N(o)]?

Run the Caption utility by recalling it from the System Utilities disk.

1. Place the System Utilities disk in the F0: drive.
2. Enter the command

**old f0:caption;run**

If the Caption utility is in the top-level catalog of the Winchester, run it by entering the command

**caption**

*Instructions for  
running the Caption  
utility*

## ***Caption (con't)***

### ***Creating a caption file***

1. Enter the subcatalog containing the sound files whose captions are to be viewed or edited.
2. Run the Caption utility.

The Caption Display appears with a prompt asking if you want to view sound file captions.

3. Enter Y to create a caption file.
4. Enter the filename or treename of the caption file to be created and press Return.

A caption file containing all the sound file captions in the current catalog is created. If you press Return without entering a filename, the caption filename is "-caption."

You are automatically returned to the Monitor after the caption file is created.

## *Using the Caption utility to update sound files with edited captions*

1. Enter the subcatalog containing the sound files whose captions are to be updated.
2. Run the Caption utility.

The Caption Display appears with a prompt asking if you want to view the sound file captions.

3. Type N to answer "no."

A prompt appears asking if you want to update sound file captions.

4. Type Y to answer "yes."

A prompt appears asking you to enter a treename.

5. Enter the treename or filename you used when creating the caption file.

Messages on the screen indicate each updating.

When all sound files have been updated, you are automatically returned to the Monitor.

**Note:** If your Caption utility is in the top-level catalog of the Winchester, you can update individual sound file captions from the Monitor by entering the command:

**caption** <filename> <new caption>



## ***Tapecat***

The Tapecat utility allows you to make changes in the catalog of files stored on the tape drive.

### ***Changing your tape directory with Tapecat***

1. Run the Tapecat utility.

The Tapecat Display of instructions and commands appears.

2. Enter the **load** command.

The catalog directory of the tape in the tape drive is loaded into memory.

3. Select a command from the list on the tapecat display, type in the first three letters of the command and press Return.
4. Enter other commands as desired.
5. If you have entered the **sort**, **unsave** or **rename** commands, enter the **update** command to update the catalog directory on the tape.
6. When you are finished, enter the **quit** command to return to the Monitor.

#### Tape Drive Management Utility - 1 December 1987

This program is used to clean up and rearrange a catalog on a cartridge tape. To enter a command, just type the command name when you see the '=' prompt.

Command	Action
LOAD	Loads a tape in the tape drive.
UNLOAD	Unloads a tape from the tape drive.
CATALOG	Prints the tape catalog plus any changes you've made.
DUMP	Prints all catalog info (including SECONDS for sound files).
HARDCOPY	Creates a hardcopy of the DUMP output.
SORT	Sorts the tape's catalog alphabetically.
UNSAVE	Unsave a file from the tape.
RENAME	Renames a file on the tape.
UPDATE	Updates the catalog on the tape.
UNDO	Undo any SORT, UNSAVE, or RENAME done since last UPDATE.
QUIT	Return to MONITOR.
HELP	Prints these instructions.

No changes are made to the tape until the UPDATE command is issued.

If you make a series of changes and then change your mind, the UNDO command will read back the original catalog from the tape.

=>

## *Tapecat Display*

Run the Tapecat utility by recalling it from the System Utilities disk.

1. Place the System Utilities disk in the F0: drive.
2. Enter the command

**old f0:tapecat;run**

If the Tapecate utility is in the top-level catalog of the Winchester, run it by entering the command

**tapecat**

## *Instructions for running Tapecat*



## ***Oplist***

The Oplist utility, stored on the System Utilities Disk, is used to display or print a list of all the files on an optical disk.

## ***The Optical Disk Listing Utility***

You can produce a list of all the files and categories on an optical disk volume using the Optical Disk Listing Utility. The list can be sent to a printer or displayed on the terminal screen.

You can list filenames only or categories and filenames. In either case, the list can include the file length in seconds and in megabytes, the caption and a letter that indicates whether the file is a stereo file or a mono file.

The Optical Disk Listing Utility is accessed from the Monitor.

1. Insert the 5.25" disk labeled System Utilities Disk into the floppy drive and turn the lever down.
2. At the Ready prompt of the Monitor, enter the command

**old f0:oplist;run**

A message appears at the top of the screen.

Optical Disk Listing Utility version of 10 June 1988  
Enter name of index file or <RETURN> to quit:

3. Enter the name of the optical disk volume you want to list. It does not have to be the currently loaded volume.

This message appears.

Display File List [Y(es) or N(o)]?

*(continued next page)*

## *The Optical Disk Listing Utility (con't)*

4. Type the letter **y** if you want a list of filenames only. Otherwise type **n**.

Another message appears.

Display Category List [Y(es) or N(o)]?

5. Type the letter **y** if you want a list of categories and filenames. Otherwise type **n**.

Another message appears.

Display all file information [Y(es) or N(o)]?

6. Type the letter **y** if you want the list to indicate whether each file is a stereo file or mono file, the file length in seconds, the file length in megabytes and the caption. Type **n** if you do not want to include this information on your list.

The final message appears.

Send output to printer [Y(es) or N(o)]?

7. If you want to print a hardcopy of the list, be sure your printer is ready and type the letter **y**. If you want to display the list on the screen, type **n**.

When the specified list is printed, the Ready prompt reappears.

Note: You can halt the listing procedure at any time by pressing Ctrl-Spacebar. If you display the list on the screen, you can stop the scrolling by pressing the F15 key. Press the F15 key again to continue scrolling.

## ***Listing***

The Listing utility prints out files from any attached storage device onto any attached printer or terminal screen.

## ***Printing files in a subcatalog***

You can print any number of hardcopies of any or all files in a subcatalog—with an index of the files printed, if desired.

1. Run the Listing utility.

The Listing menu appears on the terminal screen with instructions at the top of the screen, commands and options in the middle of the screen and a space for the title of the listed file at the bottom.

2. Set the Listing options as desired.
3. Press Return.

The selected files are printed to the selected printer or terminal. If all files are printed, they are printed in the order they appear in the current catalog; if the selection option is set to "yes," they are printed in the order the selection is made.

4. When you are finished printing files, enter the command

**Q**

The Monitor Ready prompt appears.

**LISTING Utility** version of 1 April 1987

To issue a command, press the key that represents the command.  
To change an option, move the cursor over the option and press the space bar or type the new value.

COMMANDS:	OPTIONS:
C to display Catalog	Storage Device: W0 (Winchester disk)
T to change Title	Printer Type: IDS/Dataproducts
Q to Quit (return to system)	File Select: No
RETURN to start printout	Print Index Page: No
	Number of Copies: 1
	Page Length: 66
	Page Width: 80

Title \_\_\_\_\_

Listing from: W0 (Winchester disk)

---

SELECT option: Use cursor keys to move over files. Press the space bar to select or deselect a file to list. Press R to review the order in which the files will be listed. Press RETURN to initiate the listing. Press Q to abort the list operation. Selected files are marked with a >.

>PROFILE >RECOVER |WSOURCE |MEASLIST |\$TUNE |\$SONG

## Listing Display

### Listing option screen

Run theListing utility by recalling it from the System Utilities disk.

1. Place the System Utilities disk in the F0: drive.
2. Enter the command

**old f0:listing;run**

If the Listing utility is in the top-level catalog of the Winchester, run it by entering the command

**listing**

### Instructions for running Listing

## ***Listing (con't)***

### ***Setting Listing options***

To set the Listing options:

1. Move the cursor to the option to be set.
2. Press the Spacebar until the desired item appears. On the last three options, type in the desired number.

***Storage Device.*** Select any device in your system.

***Printer.*** Select any printer, or select terminal if you want the files printed out on the terminal.

***File Select.*** Select "No" if you want all files on the specified storage device printed in the order they appear. Select "Yes" if you want to select the files to be printed before the printout begins.

***Print Index Page.*** Select "Yes" to print an index of files, including the page where each file begins and its length in words. The index also includes each Procedure, Insert, When, Library and Module statement along with its page and line numbers.

***Number of Copies.*** Type in the number of copies desired.

***Page Length.*** Type in the number of lines you want on a page. Be sure to remain within the physical limits of the paper or printer you are using.

***Page width.*** Type in the number of columns per page. Be sure to remain within the physical limits of the paper or printer you are using.

## *Selecting files to be listed*

If you indicate "yes" on the file select option, a directory of all the files in the current catalog appears when you press Return to start the listing.

To select files:

1. Move the cursor to each file in the order you want them listed and press the Spacebar.

The "|" symbol preceeding the filename changes to ">."

You can review the order in which the files will be listed at any time by pressing R. You can change the order by deselecting and selecting files as often as you wish.

2. Press Return.

The marked files are listed in the order selected.

## **Oprepair**

The Oprepair utility, stored on the System Utilities Disk, is used to repair files after an optical disk write error.

## ***The Optical Disk Repair Utility***

When you save or delete files on the optical disk, an error message sometimes appears on the screen.

Unable to write directory entry

If this message appears, you can use the Optical Disk Repair Utility to move the directory information to a new area of the disk. Running the Optical Disk Repair Utility decreases the amount of space available on the disk.

**Warning:** If you have to repair disks often, your drive may have an alignment problem. Please contact your N.E.D. Customer Service representative.

Run the Optical Disk Repair Utility only on disks which produce the error message shown above.

1. Insert the disk you want to repair into the optical disk drive and press the START/STOP button.

The Ready Indicator on the button blinks and then remains lit.

2. Insert the 5.25" disk labeled System Utilities Disk into the floppy drive and turn the lever down.

*(Continued next page)*



## *The Optical Disk Repair Utility (con't)*

3. At the Ready prompt of the Monitor, enter the command

**old f0:oprepair;run**

A message appears on the screen.

Do you wish to repair this optical disk cartridge  
[Y(es) or N(o)]?

4. Type the letter **y** to begin the repair process, or type the letter **n** to return to the Monitor without repairing the disk.

If you type **y**, messages appear on the screen to indicate the status of the repair process. When the process is complete, the Ready prompt appears.

If the disk cannot be repaired, an error message appears. Please copy the exact text of the message and contact your N.E.D. Customer Service representative.

**Note:** Use a repaired optical disk only with Release O or updated Release N (revision date 6/21/88) software. Any other software will not recognize the repairs, and therefore will be able to access only files written before the disk was repaired.

## ***Compare***

The Compare utility locates differences between two files. It can be used to compare either text files (script compositions or other text files) or data files (sound files, sequences, timbres).

## ***Comparing two files***

1. Run the Compare utility.

A prompt appears asking for the first filename.

2. Enter the first filename (or treename) and press Return. If you want the first file to be the current file, simply press Return.

A prompt appears asking for the second filename.

3. Enter the second filename (or treename) and press Return. The file type of the second file must match the file type of the first.

The first difference between the two files is displayed on the screen, along with a prompt to press Return to see the second difference.

4. Continue to press Return to view all differences in the two files.

When all the changes have been displayed, the Monitor Ready prompt appears.

**Note:** You can compare the current file to its stored version on disk by entering no filenames for either the first or the second file.

## *Compare Display*

Ready > old f0: compare; run

Compare Utility—1 February 1987

Old file:

Run the Compare utility by recalling it from the System Utilities disk.

1. Place the System Utilities disk in the F0: drive.
2. Enter the command

**old f0:compare;run**

If the Compare utility is in the top-level catalog of the Winchester, run it by entering the command

**compare <filename 1><filename2>**

## *Instructions for running Compare*

## ***Recover***

When sectors of a floppy or Winchester disk are defective, you cannot recall any file stored on these sectors.

The Recover program allows you to recover the undamaged parts of such a file. Text files are the easiest to reconstruct, but in certain cases it is possible to recover other types of files.

## ***Recovering damaged files***

1. Run the Recover utility.

The Recover Display appears.

2. Type

OK

and press Return.

A dialog asks you where the damaged file is located and lists the devices in your system.

3. Type in the device name (without the colon) and press Return.

A dialog asks for the name of the file to recover.

4. Type the filename and press Return.

As much of the file as can be recovered is written into the current catalog on the Winchester disk, or into the top-level catalog if the current catalog is on a floppy disk.

At the end of the Recover operation, the Monitor Ready prompt appears.

Recover File Utility - 1 December 1987

This program allows you to recover text files from damaged disks. This program cannot recover damaged data. After running this program, small sections of your file will still be damaged, but these sections can easily be re-entered using the Screen Editor. The program tries to give you an indication of where the damaged information is in the file, but the best way to find the damaged sections is to scroll through the recovered file using the Screen Editor.

Type 'OK' and press RETURN if you want to proceed ->

Run the Recover utility by recalling it from the System Utilities disk.

1. Place the System Utilities disk in the F0: drive.
2. Enter the command

**old f0:recover;run**

If the Recover utility is in the top-level catalog of the Winchester, run it by entering the command

**recover**

*Instructions for  
running Recover*



## ***Trouble-shooting***

There may be times when you are unable to load your system using your regular Winchester bootload disk. This may be due to failure of the bootload disk or a problem with one of the hardware components in your system. Before you call New England Digital Customer Service, read this section carefully.

### ***Diagnostic disks***

Two floppy disks contain programs that can be used to help diagnose hardware problems in your system.

System Diagnostic Disk  
Audio System Diagnostic Disk

Both disks have self-contained system software. You can use either disk to load your system.

Most of the diagnostic tests are designed to be run under the supervision of the New England Digital Customer Service. Many system problems can be solved by your running specific tests and reporting the results back to New England Digital. A Customer Service technician may be able to walk you through the appropriate troubleshooting steps.

## ***Making a copy of the disks***

Since you may be using a diagnostic disk when your system is not working properly, you should make a copy of it and use the copy, not the original, to load the system. You can use Formcopy program on the System Utilities Disk to make a copy.

1. Insert the System Utilities Disk in the F0 drive and press the LOAD button.

The Ready prompt appears on the terminal screen.

2. Recall the Formcopy program by typing

**old formcopy; run**

The Formcopy menu appears on the screen.

3. If you are copying onto an unformatted disk, select the Format and Copy mode; otherwise leave the mode set at Copy.
4. Press Return, type OK and press Return again.

If you are running the system from a single floppy drive, you have to exchange the Source disk and the blank disk several times during the copy process. The program tells you when to do this.

## ***Trouble- shooting (con't)***

### ***Loading the system with the System Diagnostic Disk***

1. Place the copy of the System Diagnostic Disk into the F0 drive.
2. Press the LOAD button.

The Diagnostic Main Menu appears on the terminal screen. If you do not have a VT640 or Pericom terminal, the terminal screen may be garbled.

3. Press Return.

The Configur menu that appears on the terminal screen shows the configuration for a minimal system which may not correspond to your system.

4. Reconfigure the disk for your system hardware and the appropriate terminal.

## *Diagnostic Main Menu*

### **SYSTEM DIAGNOSTIC PROGRAMS**

A.CONFIGUR	B. DTDMENU
C.EXTMEM	D. FLOPTEST
E.GRAPHTST	F. KEYBOARD
G.LOGGER	H. MAINMENU
I. MEMBURN	J. MIDITEST
K.MULTICHN	L. PRINTEST
M.PSXMBT	N. SMPTETST
O.TAPETEST	

Select program using arrow keys and press Return to begin execution.

## *Direct-to-Disk Diagnostic Menu*

### **DIRECT-TO-DISK DIAGNOSTIC PROGRAMS**

A. EXTMEM	B. LOGGER
C. MAINMEM	D. MEMBURN
E. METERTST	F. MIDITST
G. PSXMBT	H. STARTUP

DTD Terminal Type: VT640

Specify the DTD diagnostic terminal type using Spacebar, select a program by letter or arrow keys, and press Return when ready.

Spacebar — Change terminal type.

Break — Exit

## ***Trouble- shooting (con't)***

### ***Running a diagnostic test***

The Main Menu displays the names of the diagnostic tests for the Synclavier. Direct-to-Disk diagnostic tests are accessed from item B on the Main Menu, DTDMENU.

To run a Synclavier diagnostic test:

- Move the cursor to the appropriate test name and press Return. Or type the letter that preceeds the test name.

The test begins running.

To run a Direct-to-Disk diagnostic test:

1. Select item B on the Main Menu, DTDMENU.

The Direct-to-Disk menu appears on the terminal screen.

2. Select the desired test.

The test begins running.

## *Synclavier and Direct-to-Disk diagnostic tests*

test	function
Configur	Configures the diagnostic disk to match the hardware in your system.
Extmem	Tests external memory, both M128K and M512K Dynamic RAM boards.
Floptest	Tests the floppy drive and interface card.
Graphst	Tests graphics printing.
Keyboard	Tests functions of the Velocity/Pressure keyboard.
Logger	Tests Synclavier system functions.
Mainmem	Tests 60K or 63K of the main memory.
Memburn	Tests main memory.
Meterst	Tests Direct-to-Disk meter bridge display. Accessed only from Direct-to-Disk Menu.
MIDIst	Tests MIDI system.
Multichn	Tests Multichannel Distributor.
Printest	Tests printer and printer interface card.
PSXMBT	Tests poly memory.
SMPTEst	Tests SMPTE board.
STARTUP	Tests storage capability of SCSI devices used with Direct-to-Disk. Accessed only from Direct-to-Disk Menu.



## ***Trouble- shooting (con't)***

### ***Loading the Audio System Diagnostic Disk***

The Audio System Diagnostic Disk can be used to locate problems with FM synthesizer and polyphonic sampling voices. You use this disk when you are having trouble with the audio output of your system.

To use the Audio System Diagnostic Disk:

1. Place a copy of the disk in the FO drive.
2. Press the load button.

The Welcome Menu appears on the terminal screen.

3. Press Return to select the Timbre Directory.

The Audio Testing timbre directory appears. Timbres stored in banks 1—4 are for testing the FM synthesizer voices. Timbres in bank 5 are for testing the polyphonic sampling voices.

For specific procedures on running the different tests, call NED customer service.

# TIMBRE DIRECTORY

1. Use arrows to move cursor, <RETURN> to call up timbre, <ENTER> when done.
2. Select devices with 1, 2, 3, ...
3. Devices — 1 W1: 2 W0: 3 F0:

E N T R Y	BANK 1		BANK 2		BANK 3		BANK 4	
	1. SINE TONE		ALL HARMONICS		STEREO LEFT		PORTAMENTO	
	2. FM 127		SINE VIBR/VEL		STEREO RIGHT		FM/PORT/HARM	
	3. FM 255		VIBR/HARM/VEL		STEREO PAN		FM	
	4. FM 511		TRI VIBR/VEL		AM ATTACK		FM	
	5. FM 1000		TRI VIBR/HARM		AM ATTACK LONG		FM	
	6. VOL DECAY		SUSTAIN 0.7		HARM ATTACK		FM/PORT	
	7. WAVEFORM MEM		SUSTAIN 1.6		SINE2 VIBR/VEL		FM	
	8. PORTAMENTO		SUSTAIN 3.2		PULSE/VIBR		(EMPTY TIMBRE)	
E N T R Y	BANK 5		BANK 6		BANK 7		BANK 8	
	1. POLY SINE FILE							
	2. POLY SINE LEFT							
	3. POLY SINE RIGHT							
	4. POLY SINE PAN							
	5. (EMPTY TIMBRE)							
	6. (EMPTY TIMBRE)							
	7. (EMPTY TIMBRE)							
	8. (EMPTY TIMBRE)							